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ABSTRACT

This paper reports on the latest phase of a multiyear interdisciplinary research project aimed at describing the characteristics of highly successful classrooms for minority students. The first phase was a study of literacy instruction in 40 4th and 5th grade classrooms in Denver (Colorado) schools. This study provides a detailed explanation of the classrooms of three teachers identified in that study whose students consistently performed higher on measures of literacy than would have been predicted by pretests and background variables. Classes were observed and videotaped at the beginning of the school year and at intervals throughout the year. Interviews were conducted with the three teachers and selected students and parents. Achievement test scores, grades, and four measures of student achievement and attitude developed by the researchers were obtained. Analysis of these outcome measures confirmed the teachers' success and observation of the classrooms provided evidence of their success in motivating students. The study points to the importance of looking at classrooms as social microcosms. Each teacher stressed reading and writing, but teaching method and materials did not explain their success. Their philosophies were different, as were their instructional activities, but the success of each classroom lay in the construction of a coherent social environment anchored around values that gave a strong sense of meaning and purpose. Results reaffirm that teaching is a highly personal and human endeavor. (Contains 4 tables and 47 references.) (Author/SLD)

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High Achieving Classrooms for Minority Students:

A Study of Three Teachers

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High Achieving Classrooms for Minority Students: A Study of Three Teachers

ABSTRACT

This paper reports on the latest phase of a multi-year, interdisciplinary research project funded by the U.S. Department of Education and the University of Colorado at Denver, aimed at describing characteristics of highly successful classrooms for low income minority students. The first phase of research began with a study of literacy instruction in 40 fourth and fifth grade classrooms in Denver area schools during the 1990-1991 academic year. The current study provides a detailed examination of the classrooms of three teachers identified in that study whose students performed significantly higher on measures of literacy than would have been predicted by pretests and background variables. Preliminary research questions focused on how teachers created a social environment conducive for learning, and how they dealt with individual differences among students. A third question focused on students' appropriation of the teachers' perspective of learning and ways of thinking. Classes were observed and videotaped for the first eight days of school and periodically throughout the year, with extended consecutive observations in February and May. Interviews were conducted with the teachers and selected students and their parents. ITBS scores, district achievement test scores, teacher grades, and four measures developed by the researchers -- a written retelling measure, a test of reading, and two attitude measures -- were obtained. Analysis of the outcome measures confirmed the teachers' success; student gains on standardized tests exceeded district and national norms, and observation and interview data provided clear evidence of the teachers' effectiveness in motivating students to meet their expectations.

The study points to the importance of looking at classrooms as social microcosms, interacting and overlapping with the lives of children in families and communities. Each teacher placed great importance on reading and writing, and spent considerable time with these activities daily. Yet teaching method and materials did not explain the teachers' success. The three teachers adhered to very different philosophies and utilized dramatically different instructional activities. The success of each classroom lay in creating a coherent social environment, anchored around the importance of key values that conveyed a strong sense of meaning and purpose. The teachers sent clear messages to students, in what they said, what they did, and the ways they allocated time and organized activities. This provided students with new ways of thinking about school, themselves, and their participation in daily activities. Teachers became well acquainted with each child, and built up strong reciprocal relationships consistent with the importance placed on learning. Activities were structured so that every child could make a valued contribution regardless of previous achievement and ability.

The research re-confirms the observation that teaching is a highly personal and human endeavor. Well intentioned efforts to improve schools and teaching by mandating the use of particular materials and techniques may actually interfere with the careful cultivation of relationships that enliven children in classrooms and ultimately result in accelerated learning.

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The success of this project is the result of the good faith and tireless effort of a large number of people. First, a word about the order in which authors are listed on the title page. Clarke, Davis and Rhodes are listed first, alphabetically, to reflect their involvement in the research from the beginning; all have been with the project since its inception, serving as co-principal investigators on the two OERI funded research projects, and collaborating on university grants acquired in the process. Baker joined the group in three years ago; Since then, we have functioned as equal partners in the research. It is important to affirm that the success of the endeavor is a result of collegial interaction of all four of us; we all contributed equally, though idiosyncratically and with differing amounts at different times. Clarke is Associate Professor in the Language, Literacy, and Culture Division; Davis is Associate Professor of Research, Evaluation, and Measurement; Rhodes is Associate Dean of the Initial Teacher Education Program; Baker is Director, Workplace Learning, Colorado Community College of Denver, and Adjunct Professor of Education, UCD. Direct inquiries to Clarke (mclarke@carbon.cudenver.edu) or Davis (alan_davis@together.cudenver.edu).

The research team of the Colorado Literacy Study included UCD colleagues Nancy L. Commins, Rene Galindo, Sally Nathenson-Mejia, Nancy L. Shanklin, Nancy Sanders, Sheila M. Shannon, and Myra Bookman. Many insights reported here initially emerged from the heady days of that project. In addition to the authors, the research team included Craig Hughes and Barbara Medina, doctoral students at the University of Colorado at Boulder, during the fall semester. Preliminary analysis of students' writing was conducted by Marianne Selkirk, Chapter I teacher, Jefferson County Schools, Colorado.

Eight individuals emerged from the Colorado Literacy Study as notably effective teachers: Jackie Arriaga, Dan Boyle, Mary Fahey, Gloria L. Lucero, Guadalupe Lopez Leece, Delessia Rucker, Barbara Stuckert, and Eleanor VonBargen. All teachers worked with us during the summer and fall preceding the study as we refined the research questions, adjusted data collection techniques and identified students for case studies. We would like to take this opportunity to express our admiration for their competence and enthusiasm and to thank them for the time and effort they gave to the study.

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Introduction

Classrooms are places where low income minority students often do not thrive. The reasons for this are complex. The culture of the classroom and the culture of the home are often far apart in patterns of language, ways of thinking, and ways of acting. Children from minority and low income families enter school with different patterns of communication and participation than those expected and reinforced by the school (Au 1980; Erickson & Mohatt 1982; Heath 1983; Labov 1972; Shannon 1990; Wolcott 1967; Philips 1983). Perceptions of status, identity, and belonging are at issue as students and teacher negotiate the activities of the class and interpret what it means to participate in them. The implicit and explicit values and participation structures of schools frequently imply to low income students that they belong at the margin and are not fully acceptable (Brantlinger 1993; Willis 1977; MacLeod 1987). The ranking and sorting of students and the differentiation of curriculum for high and low groups accentuate these perceptions and contribute to the reproduction within the school of social and economic divisions within the larger society (Habermas 1979; Apple 1982; Bowles & Gintis 1976). Low income minority students may interpret the differences they perceive between themselves and the culture of the school as evidence that academic success is actually undesirable, and direct their energies elsewhere (Ogbu 1987; Solomon 1992; Fordham 1993; Fordham & Ogbu 1987; Bourdieu 1977).

Within the generally grim pattern of minority failure in schools there are sites of success, classrooms in which low income minority students demonstrate unusual improvement in reading and writing, take on new ways of thinking, and participate in academic activities with enthusiasm. This study takes a detailed look at three such classrooms.

We examine instruction in reading and writing within the larger institutional and social context of these classrooms, seeking to understand the common features of their success. First, we describe the process used to select the classrooms and our criteria for identifying successful teaching. We believe that the most direct evidence of good teaching is successful learning. In the first section of the paper, we describe our analysis of several indicators of learning that led to the selection of these teachers and confirmed their effectiveness. The following three sections of the paper provide brief portraits of the three teachers and their classrooms. We attempt to convey an image of the pace and rhythm of the typical day, and we elaborate on the core values that shape the teachers' instruction. We then describe the research method. In keeping with established qualitative traditions, we began with key research questions and a commitment to ethnographic procedures, but the progress of the study was shaped by emerging events and analyses. In retrospect, we can identify four research cycles; these are described in sufficient detail to permit the reader to understand how conclusions emerged from the process. Conclusions are presented in two formats in the following section of the paper. First, we describe classroom features that apply to all three classrooms. Then, we provide an analysis of what we see as the characteristic of these classrooms that unites them in spite of the fact that the particulars are strikingly different in each case: the coherence of children's experience in the classrooms. Finally, we discuss implications for teachers and administrators. The research re-confirms the observation that teaching is a highly personal and human endeavor (Lave 1996; Dyson 1993; Bateson 1994; Jackson 1968/1990; Newman, et al. 1989). Well intentioned efforts to improve schools and

teaching by mandating the use of particular materials and techniques may actually interfere with the careful cultivation of relationships that enliven children in classrooms and ultimately result in accelerated learning.

Selection of Classrooms and Indicators of Success

Three teachers were selected for study on the basis of the improvement demonstrated by their students on six performance indicators during a study of 40 fourth grade teachers conducted in 1990-91 (Davis, et al. 1992; Davis, et al. 1994). These teachers all taught in Title I schools in which more than 60% of the students were Mexican American or African American. Six student outcome measures were administered pre and post: two indicators of performance in reading (the Reading Test of the *Iowa Tests of Basic Skills* and a test of written retelling adapted from the *Qualitative Reading Inventory*), two indicators of performance in writing (three writing samples completed at the beginning of school, in February, and at the end of the school year, and the Language Test of the *Iowa Tests of Basic Skills*), and self-report measures of attitude towards reading and writing, all administered pre and post. All of these measures were standardized: all students were presented the same prompts and their responses were produced under similarly controlled conditions.

To avoid the technical problems associated with using gains as indicators of learning (Linn 1986), hierarchical regression residuals were used (Bryk & Raudenbush 1992) to estimate the differences in the amount of learning demonstrated by students in each classroom after adjusting for differences in the pretest and student ethnicity individually and for the class as a whole. A sequence of screening procedures were employed using these regression residuals to identify a pool of teachers whose students had demonstrated strong results on several outcomes. First, teachers were identified whose students showed high positive residuals on both the ITBS Reading Test and the constructed-response test of reading retelling. This list was further shortened by including only teachers with positive residuals on the scored writing samples. Finally, the residuals on the two attitude measures and the ITBS Language Test were considered. No teacher had positive residuals on all six measures; the ITBS Language Test and the attitude measures were weighted approximately equally in the final selection.

The three teachers studied here were selected in that initial analysis. The students of all three teachers showed unusual progress in reading. Each group showed positive residual scores on the two reading outcome measures, and all were among the top 5 of 40 classrooms for combined reading outcomes. To illustrate using a more familiar metric, it may be helpful to report the gains of these students on the Reading Test of the *Iowa Tests of Basic Skills* using normal curve equivalent scores, a standardized score similar to a percentile score ranging from 1 to 99, used nationally to evaluate the effectiveness of the federal Chapter 1 reading program. Although the average 12-month gain for students in the 40 classrooms we studied was 0.0, students in the classes of Jeri, Martha, and Edith (pseudonyms) made

average gains of 6.00, 8.11, and 4.78 respectively. These gains correspond to effect sizes (Glass, et al. 1981) of .29, .39, and .23. The students of these three teachers were also among the highest on measures of reading retelling and attitude towards reading after adjusting for the level of the pretests.

The classrooms of Martha and Edith were among the top 5 of 40 classrooms in respect to residual scores for minority students on writing samples in 1990-91. Their students also showed gains of 3.57 and 3.67, respectively, on the ITBS Language test, whereas the full contingent of 40 classrooms demonstrated a loss (mean = -1.14). Jeri's students showed growth in writing that was slightly above the average for the 40 classrooms that year.

We were interested to learn whether a different set of students learning with these three teachers would show similar growth during the year of our in-depth study. As in the year of the initial study, the demographic profiles of the classrooms reflected the neighborhoods in which the schools were located -- predominantly minority (African American, Latino, and Asian) and low income. The evidence we were able to collect strongly confirmed the earlier indicators of effective instruction.

ITBS. On the *Iowa Tests of Basic Skills*, students in all three classrooms made strong gains on the reading and language tests. The results are shown in Table 1. Results for Martha Kendall's students are based on the gains by the 13 fourth grade students tested in April of the fourth grade compared to their scores as second graders (the most recent testing for these students). Other gains are from the spring of third grade to the spring of their fourth grade year.

Table 1
Mean ITBS Scores in NCEs

		Reading			Language		
	n	Pretest	Post	Gain	Pre	Post	Gain
Jeri	21	28.1	38.9	10.8	33.1	42.0	8.9
Martha	13	49.8	70.2	20.4	46.5	74.7	28.1
Edith	21	37.9	43.9	6.0	30.1	42.8	12.6

Criterion referenced test of language. The school district also administers a criterion-referenced mastery test of language to all students in the fall, in midwinter, and in the spring. The mean scores for the three teachers in our study for the three administrations of the test and the gain from fall to spring are displayed in Table 2.

Table 2
Average Percent of Skills Mastered
Assessment of Learning Proficiencies and Skills (ALPAS)

Teacher	Fall	Winter	Spring	Gain
Jeri	22.7	42.2	53.3	30.6
Martha	42.1	78.2	93.3	51.2
Edith	41.8	66.8	72.9	31.1

The test purports to measure mastery of discrete skills in reading, writing, and language conventions. For example, tested skills include finding the main idea of a paragraph, using punctuation marks correctly, and organizing writing into paragraphs. Students are tested through the use of multiple choice questions and writing samples on assigned topics. Scores are expressed in the percent of skills mastered. The mean performance district-wide on the test in recent years has been about 23% of the objectives mastered in the fall and 45% in the spring -- a gain of 22. Students in all three classes showed greater gains than is typical in the district. No student in Martha's class scored below 62% in the spring, and half scored above 95% mastery.

Reading retelling. We tested the ability of students to understand and recount a story-length text by administering tests of written re-telling adapted from the Qualitative Reading Inventory at the beginning and end of the year. Fourth grade English speakers wrote on a passage called *The Busy Beaver*, fifth grade students wrote on *The Octopus*. Monolingual Spanish speakers (three fourth graders in Arrellano's class) wrote on *Gatos: Leones y Tigres en su Casa*. Inter-scorer reliability was estimated by finding the average intra-class correlation for two scorers working independently. The average correlation was .91 for the three texts. The texts varied in length, and each was scored on a different scale. In the fall, the average score for fourth graders on *The Busy Beaver* was 25.1 (S.D. = 9.7); for fifth graders on the *Octopus*, 38.9 (S.D. 16.6), and for *Los Gatos*, 10.0 (S.D. = 4.4). To combine the three stories into a single analysis, we standardized the scores on the pretest as z-scores with mean of 0 and standard deviation of 1, and used the pretest means and standard deviations to standardize the post test scores for each text. The results are shown in table 3.

Table 3
Mean Standardized Scores in Reading Retelling
Qualitative Reading Inventory Passages
(Pretest Mean = 0.00)

Teacher	Pre	Post	Gain
Jeri	-.60	-.23	.38
Martha	0.03	1.09	1.06
Edith	0.47	1.14	.67
Total	0.0	.72	.74

The results show that Jeri's students performed considerably lower on the pretest than students in other classes, indicating substantial weaknesses at the beginning of the school year. Edith's students performed highest initially in comparison to other fourth grade students. Students in all three rooms showed gains of more than .3 standard deviations. Martha's students gained 1.06 standard deviations -- an impressive gain on a test of reading.

Students' Assessment of Their Learning. At the end of May, the students in the three classrooms responded to five Likert-scaled statements on a printed questionnaire, where 5 = strongly agree and 1 = strongly disagree. The statements, and the mean response for each class, are shown below in Table 4. In each class, nearly all students strongly agreed that they had learned a lot in school. A strong majority agreed or strongly agreed that they had worked hard, and that their reading and writing had improved. The great majority in all three classes disagreed with the statement that school had been boring. The questionnaire data confirmed interview data: all three teachers were considered good teachers by students and their parents.

Table 4

Students' Self-Assessment of Learning

Mean Responses to Likert Statements

	Class		
Statement	Jeri	Martha	Edith
I learned a lot in school this year.	5.0	4.9	4.8
School was boring this year.	2.1	1.7	1.6
I worked hard in school this year.	4.2	4.7	4.3
My writing improved this year.	4.7	4.5	4.1
My reading improved this year.	4.4	4.4	4.3

Other Indicators of Effectiveness. In addition to the indicators discussed above, samples of student writing collected throughout the year, interviews with selected students at the end of the year, and interviews with the parents of those students provided evidence of learning and a strong positive view of each of the three teachers and their effectiveness in improving the literacy of the students. In addition, students' comments concerning literacy strongly reflected the teachers' own values and attitudes towards reading and writing and the activities of the classroom.

Our observations (more than 70 hours each) of the three classrooms further convinced us that these were indeed outstanding teachers, although the four of us came to the study from different perspectives. In the early days of the study, we were not uniformly convinced of the effectiveness of the teachers; significant questions about each of the teachers appear in field notes and preliminary analyses. Patterns of interaction and underlying rationale emerged gradually, and by the end of the school year we were all convinced that these were, indeed,

good teachers. An important feature of the classrooms that impressed itself upon us was, in fact, something we did *not* see: serious disruptions of class routines accompanied by resistance to the teacher's authority. Instead, we observed students engaged in academic activities for extended periods of time, with attention revealed in the quality of their classroom comments and the evidence of their reading and writing. We were struck by the positive relationships among students and between teacher and students, with virtually no insults or raised voices. We noted the focus of teacher questions on meaning and interpretation rather than rote knowledge. We argued among ourselves about the advisability of particular instructional techniques that we observed, but we agreed unanimously that the quality and level of student engagement was highly unusual in our professional experience.

Classroom 1: Jeri Arrellano's Formula for Making It in a Tough World

Jeri Arrellano teaches 4th grade bilingual class at Taft Elementary, in a predominantly Latino working class neighborhood, with the assistance of Mrs. Jacquez, a bilingual paraprofessional who has worked side by side with her for several years. The school sits among small frame and brick houses a few blocks near two busy thoroughfares with strip malls, filling stations, and fast food operations interspersed among Mexican and Vietnamese restaurants owned and run by immigrants. There is considerable transience in the neighborhood, much of it the result of families moving form one residence to another within the school's service area. While the population of the neighborhood has remained essentially the same over the years, life on the streets reflects the escalating gang activity and violence that characterize American inner city life. Children no longer play freely on the sidewalks or walk to each other's homes after school. In Ms. Arrellano's classroom, nearly every child knows someone who has been killed in gang related violence.

Ms. Arrellano is a native Spanish speaker and a strong maternal figure, both warm and imposing. Her friendly smile and easy informality mask an unsentimental view of reality. On the one hand she addresses the children with words of endearment, "sweetheart" and "honey", often laying a comforting hand on a child's shoulder as she passes by a desk. On the other hand, she approaches sensitive topics with a frankness that would appear brutal to some. Ms. Arrellano's ability to convey her caring for her students, along with her honest appraisal of the future that they face, comes through clearly in ten year old Renee's assessment of Ms. Arrellano's priorities:

> She wants us to get our education, and she said after we get our education we could go show her our baby, after we get our education, but while we're a teenager she don't want us showing her a baby because then she'll know we made the wrong choice.

Ms. Arrellano's over-arching goal is for students to understand the relationship between actions and consequences, to learn to make good choices, and to take responsibility for their actions at school, at home, and in the world. Her focus is on helping students

develop the skills and attitudes they need to operate successfully in the classroom and outside the classroom. Students learn what decisions to make to avoid gang and drug involvement, and how to use computers as a natural part of succeeding in a technological world. Every encounter and event in the fabric of the children's lives is a potential part of the curriculum, from gang membership and drive by shootings to new babies and peer relationships. She told us, "I want to take the mystery out things, to show them that they can develop strategies for dealing with whatever they encounter."

Life is a series of challenges in an uncaring world, and the teacher's role is to work with children, to help them deal with this reality. Toward the beginning of the year, when two of her fourth grade girls were having emotional difficulty dealing with mothers who appeared and disappeared unpredictably in their lives, Ms. Arrellano helped the girls face the situation head on. In a gentle but matter of fact manner, she talked to them about not being able to depend on their mothers, and helped them devise strategies to get themselves up on time and to school on time.

> I think you need to tell these kids that life isn't perfect and it isn't fair, but you got to keep going on. But you got to make sure you don't pity the kid. You know, the first thing is "poor kid, mom left her", but if you do that you've dug a hole deeper for that child. You kind of have to tell them, "You know, things aren't always going to work out, but you've got to keep going, and you have to make the choices."

A complementary theme to that of choices and consequences is the connecting of effort to success. It is children who make the decisions, but it is effort that fuels the ongoing process of taking responsibility for one's life, effort that determines success or failure. This emphasis on effort extends into every facet of the classroom. Effort, as well as accomplishment, brings teacher approval and determines grades. Ultimately, it is the child who determines the grade he or she earns by choosing to work to a specific level of effort; in all cases, however, Ms. Arrellano demands that students produce the products they have contracted for.

Home visits are an important way that Ms. Arrellano keeps in touch with the realities of her students' lives. "You know, I don't think you can sit here in a classroom and really expect to meet the needs of a child, of your children, until you can see what their home life is like," she told us.

The interplay of choices, consequences, personal responsibility, effort, and high expectations unfolds in a physical setting whose order is not immediately apparent, organized to facilitate a multitude of varied learning experiences. The classroom brims like a large shoe box full of children's memorabilia. Walls are covered with posters and charts in Spanish and English, some depicting celebrities reading and writing, others produced by the children; bulletin boards sag with student papers, art projects, Polaroid photos, calendars, posters displaying current units of study -- the solar system, visible man and woman, the Holocaust; art work and student papers dangle haphazardly from wires that traverse the room from

diagonal corners; bookshelves bulge with books and papers, clipboards, games, Lego sets, and puzzles; a turtle and a tarantula inhabit the terraria in the alcove along with a bank of computers; boxes and display racks hold student notebooks and published work, squeezed into shelves that one reaches by moving computers and video disc players. Near the east door an easel and chair are positioned near a large graph that serves as the calendar each month. This is the place where much activity begins, as "calendar" is the event that usually signals the beginning of a day's organized activity.

Technology plays an important role in this class. In addition to the computers in the alcove, five other computers are scattered about the room. Other technology includes a video disk player, a VHS player, an overhead projector outfitted with a MacProjector, and "Office Smart" lap top word processors. The children regularly use the Bilingual Writing Center program to produce their compositions. During free time they work with a variety of MacIntosh software -- Hyperstudio, Animal Pathfinder, Numbermuncher, Living Book, and Nigel's World. Ms. Arrellano's ease and depth of experience with computers helps set the tone of the classroom as a place where students can explore technology. As an end-of-year gift for the principal, the class produced a videodisc card in which their faces in the class photo served as hot buttons that revealed their farewell messages for the summer. The children learn how to use technology just as they learn everything else -- through experimentation, peer tutoring, gradually acquiring skills and insight as part of the normal school schedule. Although Jeri uses technology as a motivational tool ("They'll do anything for their computer"), she sees it as just another way of helping children succeed in school and beyond. "I tell them it is just a piece of equipment. It's not anything special, nothing holy."

Instruction is organized around thematic units, projects, and frequent field trips, all of which are designed to bring the world into the classroom and to take the children into the world. A unit on the Holocaust leads to discussions about neighborhood gang activity. In the "family life" unit required by the District, Ms. Arrellano moves from an abstract consideration of drugs and sex to powerful connections with the neighborhood and the children's lives, slipping easily between Spanish and English, sometimes translating or repeating, as necessary.

Academic success is treated more as a matter of setting goals and carrying through on them than on getting details right. Before children begin a project, they are often asked to organize their efforts, providing written descriptions of what they intend to do, what they think they will learn from the experience, and why they should be permitted to proceed. When activities call for explanation, she provides a brief introduction, interspersed with calls for confirmation of what has just been said, and then moves quickly to allow students to begin working. As the students plunge into the task, they struggle through their problems, asking Ms. Arrellano or Mrs. Jacquez for help, or consulting with their peers. Children who master a skill are treated as experts, and others are referred to them for help. If Ms. Arrellano senses that frustrations are running high, she may convene a group for a refresher lesson, but in general she lets the children work at their own pace. If a group is working on a new piece of software and they get stuck, she hands them the manual. "I know it's kinda cruel, but that's the real world." Individuals operate within understood constraints; as they

work on the task of the moment, they are aware of the choices they have made with respect to the task, they know the expected outcome and the process for completing it, and they know that Ms. Arrellano will monitor activity closely to assess progress within announced time lines.

There are some decisions which are clearly the prerogative of students, others which Ms. Arrellano maintains as her prerogative, and others where she lets students know that if they make the wrong choice, they will forfeit their right to make a subsequent choices in that particular situation. In interviews in the spring, students were earnest in their endorsement of this approach. Jamie's comment, "She wants us to make good choices in life," was echoed by several, with examples of how they made choices in and out of class about academic work and social behavior, working on their own with periodic help and explanations. Parents concurred, emphasizing the new responsibility their children accepted for doing homework and completing tasks.

Classroom 2:
Martha Kendall's Community of Writers

Martha Kendall teaches a combined fourth and fifth grade class at Frost Elementary, a school of approximately 300 students in a predominantly African-American area of the city. Once the center of African American community life, the neighborhood lost many of its more stable residents to the suburbs in the years following the end of legal discrimination in housing. Today, single homes with manicured lawns and flower gardens alternate with squat rows of low-income housing and crumbling HUD structures. A high incidence of gang activity and drug related violence take their toll on community life. Sentinels occupy stations at key corners, monitoring the drug trade, while anxious parents keep their children indoors after school. Violence in the streets and violence at home is a reality in the lives of many of these children.

From the first moment of the first day of school, students are invited into Mrs. Kendall's world, where they meet teacher, mother, friend, and lover of literature. For the next year, this room and this class will offer children a haven from the uncertainties of the world outside. Together, students and teacher will create a safe and comfortable environment for learning, a home away from home, where reading and writing are celebrated as companion activities. "I will be reading to you a lot," Martha tells her students on the first day of class, "and when I read to you, I want you to enjoy literature and the words you hear. When we start writing, often times you'll use a lot of the words you hear in reading."

A poster on the wall proclaims "Read widely and wildly!" Every aspect of this class -- bookshelves bulging with books, bulletin boards brimming with book jackets and titles of books read, the daily routine of reading and writing -- is testimony to the seriousness of this dictum. Through books, children will brush against adventure, fantasy, and mystery, and enter the world of imagination and of dreams. Through books they will begin to experiment with

new ideas, new words, and new forms of expression. It will be a gradual process, nurtured and modeled by their teacher, whose passion for books guides and inspires.

The rhythm of the classroom follows a set pace. The school day begins with math, followed by "daily oral language", in which flawed sentences are written on the board for students to correct. The exercise takes about ten minutes and constitutes the only large group instruction in editing conventions. Mrs. Kendall tells us that her principal had mandated that every class spend a full period on grammar, but after looking at this class's performance on the ITBS language battery, agreed to accept the ten minute exercise as sufficient.

Daily oral language is followed by reading and writing time, from 9:30 to 11:30. The session begins with Martha reading a short book aloud from the rocking chair. Children then find a comfortable place on the floor to read. Students have almost total freedom to choose what they work on, but they are expected to stick with a book or story. In the first part of the year, Mrs. Kendall will spend considerable time helping children learn to choose books -- how to read the cover, evaluate a "lead", consult with others, begin to recognize individual authors. Martha spends part of each reading period reading silently along with her students, and then begins to consult with individuals about their books -- monitoring their progress, sharing her enthusiasm for a character or scene, checking comprehension, and seeing that books are at an appropriate level of difficulty.

At 10:45, the focus shifts from reading to writing. Writing is the most significant feature of the classroom, the subject of greatest interest and serious effort. Students write every morning. Every afternoon, several volunteer to share drafts of their stories aloud, seated in the "author's chair." Responses to these readings follow a clear pattern, generally variations of "I liked the way you ...", "Do you plan to ...?" and "I have a suggestion. You could ...". A piece of writing can be "published" and shelved in the school library after it has gone through the requisite number of drafts and been submitted to the group for comments. A connection is drawn between the students' authorship and the writers of books read in class. When Mrs. Kendall reads aloud to her students, she tells them personal anecdotes about the author and points out aspects of style and technique, encouraging students to apply these in their own writing. By the end of the year, students talk naturally about their favorite authors and describe what they like about their books. Several students described how they found ideas for their own writing in books by favorite authors. A special vocabulary developed around writing: Students wrote from their own experience to become "authors of authority," writing "pieces" using "rich language" in which they "show" rather than "tell", using words from the "mittens" (mitten-shaped cutouts on the wall containing lists of synonyms).

After lunch, Mrs. Kendall reads from a "chapter" book. Social studies or science follows, with art and music occasionally appearing in the afternoon schedule. The day often ends with another read-aloud session. School adjourns at 2:45.

When children enter Martha Kendall's classroom, they enter an intense literate environment buzzing with messages -- explicit and implicit -- about the importance of reading and writing, not merely for the functional value of getting ahead in the world or doing well in school, but for far more fundamental reasons: one must read and write in order to experience life to the fullest. Every activity, all rules and regulations, the details of daily routine, the bulletin boards, bookshelves, walls, doors, closets, and the nuance of all interaction -- everything affirms this message. Literacy in all its manifestations provides the overarching valued practice that gives meaning to what is said and done during the day, and provides an answer to the questions, "Who are we?" and "What do we do here?" -- "We are writers". "We write stories, we share them with one another, and we read stories by other writers."

One never doubts what matters in this class, how to behave, or how to react. There is a unity of focus; the teacher values the children and reading and writing and she sees them all as inseparable aspects of her work. Participation is inclusive. Each child is expected to participate fully in the practice of the class, and participation is structured in such a way that each individual experiences success in making a contribution. There are structures to safeguard participation among peers. The daily ritual of individual writing conferences insures that each individual receives attention and that the relationship between teacher and student is individualized. Activities are designed in such a way that the most talented student can improve on what she has done in the past, yet less talented students can participate without risking humiliation.

When we asked Martha's students in the spring how their writing had improved, they talked about using "rich language," developing better characters, and having better ideas. When we asked about their reading, they talked about favorite authors and books that they liked. The following exchange with Jerry and Harris, two African American boys who, along with Leroy and Art, were the most athletic boys in this class, was representative:

> Harris: There's this book called *Goosebumps* and first I read the one she had and then she started buying them from the store. It's four of us hooked on those books -- me, Jerry, Art and Leroy.
> Researcher: Do you know more authors now?
> Harris: R. L. Stine.
> Jerry: And Chris Allsberg, he's good, and Gary Paulsen.

For students in this class, reading and writing had become valued activities, part of who they were and what they chose to do.

Classroom 3:
Edith Kleiner and The Best Class in the School

Edith Kleiner teaches fourth grade at Green Elementary, a school of about four hundred students located in a predominantly working class Latino neighborhood. The school is nestled in an old residential area, several blocks from the nearest thoroughfares. Homes around the school are small, mostly brick, surrounded by well-tended lawns; most were constructed in the early part of the century. Most of the children in Mrs. Kleiner's class live within walking distance of the school. After school, it is not uncommon to see them playing on the sidewalks, or walking to each other's homes.

Mrs. Kleiner describes herself as a traditional teacher. She is critical of "whole language" and "bilingual education" because she believes they do not provide enough structure or rigor for students. Her classroom calls to mind the calm, orderly atmosphere that the public has come to associate with successful classrooms of earlier generations. Ability-based reading groups, phonics drills, spelling bees, neatly decorated charts on the walls, and a host of daily rituals, routines and artifacts convey the message: serious learning takes place within these walls.

But the casual observer would be mistaken if s/he failed to see beyond the order and calm of the environment. Mrs. Kleiner's "traditional" approach is far more complex and dynamic than a brief observation would reveal. This is the classroom of a veteran teacher who applies the techniques and strategies of her long career in a rhythmic orchestration of activities designed to engage, stimulate, and challenge. She is the skilled facilitator who knows precisely when student attention flags, when a game is needed, or when a walk around the room will stretch the body and refocus the mind. Drills, work sheets, games, reading groups, spelling bees, repetition, a litany of comprehension questions - taken out of context, they could easily suggest a flat succession of routines. Seen through the eyes and experiences of students, they represent an environment that stimulates and rewards effort and achievement.

On the first day of school, Mrs. Kleiner told her students that she had been looking forward to this opening day with special excitement because she knew that this group of students was the best class in the school. She knew this, she said, because the third grade teacher who had taught many of them had told her what a truly fine group they were. Before the day had ended, Mrs. Kleiner had pointed out to the class several unmistakable signs that they were indeed the best class. When she called "freeze," they were too clever for her to catch. When they lined up for the lavatory, they were amazingly quiet. When they discussed procedures, they had very good ideas. Even the researchers from the university with their cameras were a clear sign that this was a very special class, she said. And on top of that, they were now fourth graders, capable of taking on much greater responsibility. The message was reinforced throughout the year, and when we interviewed the students in the spring, they told us without hesitation that they were the best class in the school, and pointed out the fifth grade work they had done in math, the long list of books they had read, and the advanced spelling words they had mastered.

Mrs. Kleiner divided her class into two large reading groups based on their initial reading ability. The high group decided to call itself the Foxes; the lower group named itself the Dragons. Each group began the year reading *The Boxcar Children*, a popular children's book by Gertrude Chandler-Warner. The Foxes continued with B*unnicula*, *Stone Fox*, *Freaky Friday*, *The War with Grandpa*. The Dragons read several of these books, and also read stories from a Holt basal reader.

Let us briefly examine a typical reading lesson. It is a sunny Monday morning in February, and Mrs. Kleiner announces that she wants the Foxes to come to table three for reading. She reminds the rest of the students that they have their math problems to work on. The children have a purposive air about them as they sharpen pencils, collect materials, talk to each other and the teacher, and move to different areas of the class to begin work. Mrs. Kleiner tells the class she will be "pointing tables today", which means that groups of students, not individuals, will receive demerits if they are misbehaving; five "points" means that the table will not share candy from the "goody pail" at the end of the day. She then turns her attention to the ten students gathered around table three. They settle into the customary routine with the book they are reading, *Freaky Friday*. First, there is choral repetition of the vocabulary list from the chapters; then, review of vocabulary meaning, in which Mrs. Kleiner gives an impromptu definition, and students vie for the opportunity to provide the correct word; then, a question and answer review of events so far in the book.

Mrs. Kleiner briefly summarizes a portion of the text and asks a question. Students raise their hands to be called on, give their answers, and debate differences of opinion. Questions often go beyond the literal text to ask students to predict, infer something about a character, or express an opinion. Mrs. Kleiner orchestrates these discussions, gently coaching students toward an answer. She calls for votes at times when students cannot reach consensus. Finally, students take roles from the book and read orally, answering questions from Mrs. Kleiner at periodic intervals. As they disperse to finish reading the chapter on their own or with partners, Mrs. Kleiner reminds them of vocabulary worksheets and comprehension questions to be completed for Tuesday.

After reading *Freaky Friday*, students wrote their own stories in which they awoke to discover they had switched bodies with their same-sex parent. Most of the writing in this class does not consist of fictional stories or first person narratives, however. Students wrote reports on topics associated with their reading of both fiction and non-fiction ("Samoyeds -- Dogs of the North"), response papers to fiction books, and answers to comprehension questions. Students produce a first draft of stories and reports, and revise them after receiving comments from Mrs. Kleiner.

The underpinning of Edith Kleiner's class is her conviction that all children can learn and that all children can succeed. She presides over an orderly and intensely academic environment, in which students are expected to take tasks seriously, to work diligently to complete assignments by the designated time, and to conduct themselves with decorum. She constantly challenges students to work at the edge of their competence, and she creates

opportunities for them to succeed, encouraging them for being "risk takers" and expressing mock amazement and genuine pleasure when they accomplish new heights. She sees discipline and hard work as the necessary foundation for success; her responsibility is to provide the structure and to monitor the process so that students will succeed. In the process, her students learn important lessons about being responsible for themselves and being considerate of each other. In the fast paced tempo of this classroom, children find a series of challenges that keep them focused and moving forward in their school careers.

Mrs. Kleiner's ongoing conversations with the class provide students with an interpretation of what they are experiencing and help make explicit the values and attitudes that their teacher seeks for them to adopt. When students disagree with the teacher or with each other, it is the teacher who verbally negotiates the issue, casting the best possible light on the situation. For example, on the third day of the year she exclaims to one of the reading groups, "I think we are all reading better. How many of you think you are reading better?" Hands go up, some more quickly than others, but Rogelio, one of the students who is still struggling, sits motionless. Mrs. Kleiner says, "What about you Rogelio? (silence) No? So you need a little more time?" No arguments, no validation of potentially peevish disputes with her observation that everyone is reading better. Rather, she casts Rogelio as individual with an opinion of his own, always to be respected, but quite clearly a reader who just needs a bit more time to see that he is, in fact, reading better.

Mrs. Kleiner offers students a variety of choices related to individual effort and achievement, each carrying with it the promise of recognition and reward. Students start with appropriately challenging tasks and the support to succeed at them. With a sharp and vigilant eye on previous performance, she urges students to go one step further. A child who does well in spelling will be praised and encouraged to move to the "challenge" spelling list, and then the "super challenge" spelling list. In math, students will encounter similar levels of effort, difficulty, and recognition. Reading outside of class will be recorded on a wall chart by the number of pages each child has read for the month. In each of these areas public recognition and teacher praise is the reward. Students who achieve academic milestones like "graduating" from an ESL pullout program will be applauded, as will the child who writes an interesting summary or completes an acknowledged task. In some cases, the rewards go further, like a school party or a trip to the Dairy Queen. There is an atmosphere of friendly competition in the class, with tasks moderated so that every child has successes to celebrate and sees a direct link between reward and effort. In interviews at the end of the year, students were almost cocky with their confirmation that they were the best class in the school -- in their view, they had gone farther in math, learned more spelling words, read more books, and it was "fun". Their conception of school reminded us of an athletic team coming off a victory at the Olympics.

Research Approach

We observed and videotaped for 15 days in each classroom: the first 8 days of school in the fall, five consecutive days in February, and two days in May. Additional observations were conducted in all three classrooms in November, December, and January as we focused on particular events or returned to answer questions raised by the analysis. We regularly interviewed the teachers during the time we were observing and taping. We also interviewed selected students; collected samples of student work, test scores, journals; collected all forms and handouts used by teachers; and interviewed the parents of selected students during home visits. Data collection proceeded in four cycles, described below. Analysis began at once. The work proceeded in ongoing cycles of data collection, description, analysis, and interpretation.

Cycle I: The First Week of School and Discovery of Themes

Our understanding of the social nature of learning led us to believe that the first few days of the school year would be particularly important. We focused the first stage of our inquiry with the question, "How do effective teachers establish a social environment for learning?" To begin to address this question, we first had a group meeting with the teachers during the summer before the start of school, to discuss common procedures for beginning the year. We then interviewed each one individually to learn how she prepared for the start of school -- her hopes for the year, her preparatory activities, and her goals for the first few days.

We wanted to have video cameras ready in each classroom before the start of school on the first day, so we could examine the flow of interactions from the very beginning. We especially wanted to record the initial establishment of procedures and roles, and to see how teachers' goals and expectations were conveyed through what they said and how they orchestrated the initial activities of the class. Parent permission forms were sent out the week before school started, so that they would be in hand on the first day. In Martha Kendall's class, a number of forms had not arrived on Wednesday morning when school started, so we had to shutter the camera and restrict ourselves to sound recording until all permissions were in. In the other two classes, the camera recorded the first child entering the classroom on the first day, and went on recording all day for the first eight days of school.

We observed and videotaped classroom activity between August 25 and September 3, and interviewed the teachers each day to record their impressions of students and activities. Pretest versions of the Attitude and Written Retelling measures were administered by the teacher during the first eight days. Interviews were audiotaped. All written work completed by students was collected and copied, and copies were made of the teachers' lesson plans, notes, and assessment materials.

Analysis began at once. A protocol established at the beginning of the project called for each of us to write up our impressions of each encounter within 24 hours of the event.

From these, it became apparent by Monday, the fourth day of school, that we were independently identifying distinguishing features of each classroom that ultimately were refined into key elements of the final analysis. From the beginning, two key understandings began to take shape: First, we recognized that cognitive learning, affective experience, and "classroom management" could not be separated in our analysis of classroom interaction; the flow of interaction itself always involved procedural routines, ways of thinking, and feelings, and it was through this rhythm of interpreted interaction that learning took place. Second, it was clear that these interactions were powerfully mediated by the teacher and shaped by the values that she cared most about.

As a result of questions raised in weekly analysis sessions, we returned frequently to the schools for additional observation and videotaping, interviewing, and photocopying of student work. In addition, we held monthly seminar sessions with the teachers; these meetings were used to exchange ideas on the study and to adjust data collection procedures.

Cycle II: Reading and Writing Instruction

The second cycle of data collection occurred in January and February, when we returned to each classroom for five consecutive days of data collection. Five to eight children in each class were identified in consultation with the teacher as focal students. All but one focal student in each class were minority students. We sought students whose initial performance in reading and writing varied, and included at least one student in each set who read with difficulty. We came to know these students well through observing them, interviewing them regularly, and visiting with them and their parents in their homes.

Our attention to each class as a social environment remained central, but in this phase of observation we began to attend to the teachers' interactions with individual students and the procedures through which individuals participated or did not participate in sanctioned activities in the classroom. We began with the question, "How does the teacher modify interactions in response to students' individual differences?" attending especially to instructional activities involving reading and writing.

Unlike the autumn data collection, when we needed to be in all of the classrooms during the same week, in February all four of us worked in one classroom at the same time. This permitted us to use two cameras, one focused on the teacher and the other focused on students. The other two researchers kept observation field notes, collected samples of student work, and interviewed students. Interview sessions with the teachers before and after school and during lunch provided the opportunity for us to clarify our understanding of the teachers' instruction, ask questions prompted by data previously collected or activities observed, and to focus on individual students as candidates for home visits. During this phase, we paid particular attention to the ways in which teachers and students interacted around the use of text in language instruction, and to students perceptions of reading and writing activities at school and at home.

Cycle III: Student Identity and Perceptions

The third phase of data collection occurred in May as we focused on individual students, -- interviewing them in school and visiting their homes. Recognizing that good teaching involves more than classroom instruction, we sought to understand the teachers from the perspectives of the students and their parents. School interviews were conducted with individuals and small groups of students in school libraries or empty classrooms, and revolved around the students' perceptions of their achievements that year and their opinions of the role of the teachers in helping them learn. These were audio and video taped. The home visit interviews were structured around key questions, but open-ended to accommodate parent interests and concerns, lasting from thirty minutes to an hour and a half. Our goal in these conversations was to ascertain the parents' perception of the teachers and to gauge the extent of teachers' contact with and influence on parents' support of the children. All interviews were audio tape recorded.

We also spent two days observing in classrooms and videotaping instruction as the teachers wrapped up the year. During this time, also, teachers administered ITBS and a district criterion-referenced test and the Attitude, Written Retelling and Sociogram measures. We also conducted wrap-up interviews with the teachers to get their perceptions of the year and of students' progress. We were particularly interested at this phase in documenting what students had learned -- both in the sense of how their reading and writing had changed during the course of the year, but also in the broader sense of how they had appropriated ways of thinking about reading and writing and ways of approaching those activities. During our interviews with students we were struck by how characteristic teacher phrases had entered their conversations, and how different these were from class to class.

By the time the school year ended and all testing was completed, grades submitted, and bulletin boards cleared for the summer, we had amassed a formidable amount of data for each teacher -- close to two hundred hours of video and audio tape, file drawers of transcripts, field notes, preliminary analyses, and samples of student work.

Cycle IV: Microanalysis of Interactive Processes

The final phase of analysis began in June. By this time we had identified the salient features of each classroom, and we had begun to reach consensus regarding key understandings. We were also able to describe with growing confidence the learnings that had occurred. We turned our attention next to analyzing in detail particular episodes of interaction which emerged as recurring episodes characteristic of the class, revealing the processes through which learning occurred. To do this, we followed established procedures of ethnographic microanalysis (Erickson 1992; Mehan, et al. 1986).

We first identified characteristic events and situations for each of the teachers -- Literature Studies in the case of Jeri Arrellano; Read Alouds in Martha Kendall's class; Reading Groups in Edith Kleiner's class. We examined the data set for instances of these,

and described their structure and recurring features. We then selected an episode for detailed analysis. This fine-grained analysis involved examining details of interaction to discover the defining characteristics of content and context. That is, we wanted to know what happened in the event, and we wanted to know what it meant to students, both in terms of content and in terms of what they are learning about themselves in the process (how the experience contributed to their on-going efforts at constructing their sense of themselves).

To identify what was fundamentally common to the three classrooms, we employed a process of abduction (Peirce 1955; Bateson 1972; Shank 1987; Harries-Jones 1995), a form of hypothesis construction in which descriptive elements of diverse situations can be seen as belonging to the same category of experience. We described evidence of particular student learnings that could be linked to recurring examples of interactions. We examined several examples, and then sought to identify central features and the meaning they had for participants. We then sought common patterns across different types of interactions within classes and across the three classrooms, seeking more general understandings that were grounded in the data of contextualized events.

Conclusions: Method, Practice, Coherence

If we think of teaching as a set of instructional methods, and the goal of research to determine which method is best, the differences among these teachers becomes a problem to be resolved. If, however, we understand learning to be changes in ways of thinking and acting over time, and teaching to be the creation of contexts for learning, then it is not surprising that three very different sorts of contexts can result in significant learning (Nuthall 1995). These three teachers pose a challenge to a methodological definition of good teaching (Clarke, et al. 1996). They are good teachers; we found clear evidence of the positive ways in which their students changed during the year -- the increases in their enjoyment and comprehension in reading, the increased fluency of their writing, their improved dependability and self-regulation, their appropriation of ways of thinking and valuing, and their enthusiastic endorsement of their teacher and their year in the class. Yet the approach of each teacher was very different from that of the others.

The question, "What do these classrooms have in common that can explain their effectiveness?" can be addressed at several levels. We can approach the question analytically, identifying particular features shared by all three classrooms that seem to be fundamental to their functioning. This approach has the advantage of providing the reader with easily remembered categories of phenomena that contributed to their success. We can also approach the question holistically, seeking to identify the larger phenomenon of which each class, taken in its entirety, is an example. This is a more difficult task, both for reader and writer, but it has the decided advantage of cleaving closer to the truth of the matter. This is an important point that we will elaborate upon below, but it merits emphasis now. The list

of common features presented below provides a summary of aspects that characterize the three teachers, but it may lead the unwary reader to believe that one can achieve results similar to those achieved by these teachers merely by developing particular skills. However, the accomplishment of these teachers comes from the seamless integration of these features into a coherent experience within which students learn.

We will discuss the teachers from both perspectives. We begin with a brief consideration of shared features in literacy instruction, and then move to a consideration of contextual and interactional features that transcend instruction in particular areas of the curriculum.

Common Features

The three classrooms shared several features in respect to literacy activities. All three teachers devoted a considerable amount of the day to extended periods of time for reading and writing instruction. In addition, homework and outside reading were emphasized in all three classes, and many students read as much or more at home than they read in class. The focus of their reading was books -- not worksheets of isolated sentences or paragraphs -- and their reading activities dealt primarily with extending (rather than checking) comprehension and appreciation of meaning. Students in all three classes wrote extended texts, and the production of each one took place in a series of steps, often requiring more than a week, and involving revisions of drafts following feedback from the teacher. All three teachers managed to create environments in which learners sustained focal attention (Scovel 1996) on literacy tasks and activities that fundamentally shaped the students' perceptions of themselves.

These teachers sent clear messages to students that permeated all activity. These are messages in the cybemeticists' sense of the term -- the "to-whom-it-may-concern" messages that bombard us from all sides as we go through the day (Bateson 1972; Wilden 1980; Harries-Jones 1995). The messages were evident, not just in the language they used to explicitly mediate students' perceptions of situations and events, but also in their behavior, and in the priorities that were evident in how they allocated time and organized activities. This provided students with new ways of thinking about school, themselves, and others, and new ways of behaving, often in the face of considerable peer and family pressure. The children learned how to position themselves in a world of complex cultural symbols surrounding school and learning. The messages provided a unifying focus in the classroom, around which students rallied early on; by year's end, their behavior and attitude mirrored the teacher's values. In Martha's class, the unifying message was love of literature and writing. For Jeri it was personal responsibility. For Edith the unifying theme was school achievement. Each teacher's message was different but each message was delivered and enacted so clearly that students were able to articulate it in exit interviews, often using the teacher's characteristic language to do so. Each theme reflected the central expectations that the teacher had for students, expectations that students began to hold for themselves and for others.

In these classrooms, the teachers were the undisputed authority. From the very first day, they established who was in charge, and there was never any serious challenge to their authority. This was not an authoritarian assertion of power, rooted in societal and institutional convention, but rather, an authority that derived from the teacher's inner conviction and commitment. Rules and regulations were based on values the teachers held dear, and they were able to convey the rationale to the students. This was acknowledged by students in their comments that the teachers were "fair." The students were well aware that "being fair" was a complex phenomenon, not merely a matter of treating everyone the same. The teachers responded flexibly to students according to individual temperament, need and circumstance. As one student said about Martha:

> She treats me with respect and she treats me like I am somebody. I mean, she doesn't treat anybody like nothing. She says we all have a certain talent and she brings that talent out, she shows, and in a way she makes you feel comfortable. I don't know what she does, but she makes you feel better as a person."

The authority exercised by the teachers reflected their confidence. Each had many years of experience teaching low income minority students, and they had the courage of their convictions. They took their work seriously. They believed they knew how children learn, and they had a clear sense of what was important for children to learn. They worked with single-minded intensity toward clearly articulated goals. Just as we sensed this authority in our interviews and classroom observations, the students also were aware of it. Attendance was consistent, student commitment to the teacher and to the routines of the classroom was high, and students listened to and came to adopt the message the teachers sent.

These were classrooms where individuals felt respected and appreciated, where it was safe to work, to experiment, to try new things. The teachers were always approachable, and virtually every tape has examples of children walking up to them and asking questions, showing them work, expressing opinions. The children experienced the unconditional positive regard that Rogers believed was essential for healthy personal growth, and that numerous scholars have cited as the foundation of effective classrooms (Rogers 1969; Maslow 1970; Stevick 1980). Students treated each other with respect and expected to be so treated by others. Individual rights and group responsibility were values that pervaded class events and individual interactions. All three teachers articulated the rules that establish mutual respect and consideration. Jeri constantly asked, "Is that fair? Is that how you would like to be treated?" and Martha said on the first day, "No put downs! When I was a little girl other students made fun of me, and it hurt my feelings." Edith observed that now that the children were fourth graders, and the best class in the school, certain behaviors just were not heard of. It was common to hear students evoking their teacher's rules in disputes.

The teachers knew a great deal about the students and they used that knowledge to guide their work. Instruction was individualized, taking into account affective and interactional idiosyncracies of the students. Ms. Arrellano took a personal interest in her students' families, and had taught several of their older brothers, sisters, and cousins in

previous years. Mrs. Kendall conducted long conferences with students about their work, and, when necessary, about problems that might be affecting their work. Mrs. Kleiner used test scores as the basis for many of her instructional decisions and she monitored students' achievement closely. When a student was frustrated by an activity, she immediately provided support or changed the demands of the activity; when a student experienced strong success, she quickly urged a greater challenge. It is important to emphasize that this went far beyond the approaches implied in "learning styles" or other formulaic models of teacher-student interaction. The attention these teacher paid to each child, the adjusting of tasks and explanations in keeping with each child's ability to participate successfully in an activity, and the sensitivity of the teacher to issues in the child's life outside of school, all contributed to the building of a significant relationship between teacher and child.

All three teachers created classrooms in which learning and work were taken seriously, where high expectations were matched by student effort to meet those expectations. Tasks and responsibilities were clearly established, deadlines were observed, work was logged in and evaluated, and subsequent efforts were shaped by students' effort and achievement. The teachers required students to improve with every project or task, and they paid close attention to students' progress and efforts. Students participated actively, with focused attention. A key to the success of these classrooms lay in the willing participation of students, in contrast to passive compliance, boredom, or resistance.

Coherent Practice

The account of common features just presented permits two important misunderstandings of good teaching: It isolates aspects of the teachers' behaviors and attitudes from the context and flow of daily activity, and it permits the reader to suppose that the qualities described were immediately evident as we entered their classrooms. Both suppositions are wrong. The accomplishments of these teachers can be fully comprehended only when they are understood as a function of the seemingly unremarkable conduct of life in the classroom -- the messy, unrelenting waves of banging doors, grinding pencil sharpeners, waving hands and scribbling pencils. It was a combination of the overwhelming mass of sensory data coupled with the misleading sense of familiarity (we were all children in such classrooms, we had all been back many times as adults) that contributed to the delay in our understanding of the success of these classrooms. What was most noticeable, and easiest to document, were the differences between the teachers -- their characteristic styles -- and the differences in their teaching philosophies and methods. What emerged only gradually was the common element in their teaching -- the coherence of their practice. It is important to distinguish between *style*, which we will use in referring to the teacher, and *practice*, which we will use in referring to the classroom. The former is instrumental in effecting the latter, of course, but the power of good teaching reaches far beyond the presence of the teacher. Practice refers to the values, the tone and tenor of the classroom, the fundamental rhythms and climate of daily life within the classroom. Fullan, Jackson and others have referred to this phenomenon as "moral purpose" (Fullan 1993; Jackson, et al. 1993; Goodlad 1990;

Goodlad, et al. 1990). We have come to believe that good teaching cannot be understood if we attempt to separate it into its cognitive, affective, interactional and moral dimensions; in what follows we will explain how these teachers orchestrate activities around core values and achieve coherent practice that results in dramatic learning among their students.

Learning involves changes in thinking and acting that occur in fits and pieces over time. In classrooms, learning takes place through the participation of students and teacher in a daily flow of communication focused by activities and structured by routines. It is the pattern of relationships between students and teacher and the activities in which they engage over time that constitute the coherence of practice of the class. Literally everything associated with the teacher and the classroom contributes to this coherence. Most obvious, of course, is the content of the curriculum, and the consistency with which the teachers hammered away at the central themes of their teaching. Closely allied to this are the countless times that these themes were referred to in passing, during casual conversations, in the hallways and on the playgrounds; the favorite topics and perspectives of the teachers were never far from the interaction. Rituals and routines developed around core values -- familiar ways of dealing with new information, moving from one activity to another, managing disruptions. The physical appearance of classrooms also provides important testimony to the core values of the teacher -- the jumble of student work and the presence of technology in Jeri's classroom, the bulging bookshelves and literate bulletin boards in Martha's classroom, the orderly displays and charts of accomplishment in Edith's classroom. These aspects of the classroom acquire life, however, only when animated by the presence of the teacher. These teachers constantly mediated activities and interactions; they worked tirelessly to help students understand what they were doing and why, their voices rising above the hum of classroom work to celebrate a student's accomplishment, or to remind students to follow some rule or regulation, or to bring the students' attention to an important fact in the lesson. They reminded students of work completed earlier, and they connected the current effort to events in the near future. They used familiar vocabulary that conveyed important values, emphasizing the successes of students and pressing them to see themselves as working and succeeding at important tasks.

Students learn through participation in classroom practice, and their learning involves more than the acquisition of skills and concepts; it is a process of socialization and identity development. In most classrooms, such shifts are not dramatic or uniform. The three classrooms studied here were unusual in their transformational power because their practice was characterized by unusual coherence. The meaning and legitimacy of practice in each class had its origin in strong and consistent messages of the teacher, messages rooted in the teacher's core values. This strong expression of caring provided both a consistency to the messages communicated from day to day and provided an underlying sense of meaning and purpose. Each student was able to become a valued participant in the practice of the class as the teacher used her knowledge of each student's capabilities to minimize the possibility of embarrassment and failure, adjust the demands of tasks, and confirm each individual's contribution. Tasks that extended across days and weeks and the teacher's ongoing referencing of past activities and future goals contributed to the continuity of learning across

time. As participants in coherent practice, the students in each class developed a strong sense of membership and group identity. The surprising level of sustained attention and effort we observed in each class was consistent with this sense of identity in practice (Lave & Wenger 1991).

The classroom does not exist in isolation from the other contexts in which students learn. Students are members of families. Classrooms exist within schools, located within neighborhoods and communities. Information flows from one level to another, and each level represents a context for learning and a site of membership and identity. The coherence of these classrooms did not require students to reject or devalue their participation in other spheres. Rather, the teachers found ways to relate the worlds inside and outside of school, and to draw upon students' home experiences and build alliances with parents. Classroom discussions of school achievement, literary prowess, and good decision-making were conducted in ways that students could see themselves as skilled participants in a variety of situations. Students became more adept at understanding the different requirements of various social contexts to know how to behave appropriately in each.

Implications

Discussions of how to improve the academic performance of low income minority students in reading and writing often hinge on debates regarding details of instructional method: Should learners be grouped according to ability and/or achievement? Should instruction be organized around basal readers or children's literature? Should vocabulary be taught directly, or should students infer the meaning of words when they encounter them in context? Should teachers read aloud to students, or does reading aloud take time that can be more effectively used in other ways? Should topics for writing be assigned, or should students write on topics of their own choosing? Should rules of punctuation be taught directly and rehearsed, or should such conventions be taught only when individual students need to employ them in their own writing?

This study suggests that these are the wrong questions. Two teachers may hold opposite convictions in respect to any of them, and still obtain excellent results. They are the wrong questions because they imply that instructional techniques can be labeled and evaluated apart from the ongoing practice of which they are a part. Instead, we need to understand that a classroom functions as a social system and instruction succeeds or fails according to the quality of student engagement. Through the eyes of the student entering the fourth grade, the question "Where should I put a comma in this sentence?" follows a series of much more salient questions: How do I fit into this class? What does this teacher think about me? Why are we doing this? Who cares about this? Who am I and how does this class change me? The answers to those questions -- questions of value, identity, participation, and relationship -- are central, especially for low-income minority students.

Taken in its most extreme application, this study would require radical rethinking of the nature of learning and teaching, and of the structures and processes of schooling. We do

not pursue that line of argument here, but Lave and her colleagues have made some provocative suggestions that rest on similar assumptions and that merit consideration (Lave 1996; Lave & Wenger 1991). If methods and materials do not constitute the fundamental principles of education, how do we organize our thinking about teaching and learning? Broadly speaking, we argue for an understanding of the particulars of the teaching/learning experience from the perspective of teachers and learners as "located participants" (Lave 1996, p. 158), and in examining the details of the relationships within which teaching and learning occur. We believe that the assessment of teaching and learning needs to be rooted in explicit statements about the direction and value of change that individuals experience as they participate in classroom practice. In addition, an understanding of individual students in specific contexts is required, as is an understanding of the constraints within which teachers and children work. There is no way to separate cognitive from affective concerns, or management from instruction. All of these are involved in the flow of interactions in the class all of the time. For this reason, the implications sketched below are not prioritized or listed as separate entries in a catalog of "best practices".

One important implication is that relationships are central. It is important to emphasize the distinction between *roles* and *relationships* here. These teachers deal with students as individuals, and they respond to them honestly, as individuals themselves. We do not mean by this that teachers should seek directly to be liked by students, or to be their friend. All three teachers in this study maintained a position of authority and a business-like stance towards their students and the important activities they engaged in. But they cared about each student. They also familiarized themselves with details of each student's home situation, extracurricular activities, and ongoing academic performance. They remembered what particular students were having difficulty with, and they were able to make connections between what students were doing today, what they had done previously, and what mattered to them outside of school. Teachers should strive to achieve this level of familiarity with students, and employ ways of maintaining written observations and reminders to support them in their work. In the process of building relationships, they will need to move beyond the confines of the school, initiating contacts with parents rather than waiting for them to appear at meetings or conferences. These relationships are reciprocal. The teachers we studied allowed their students to know what they cared about, and offered glimpses into their lives outside of school. They were consistent, but not cold or impersonal. They connected with students around shared enthusiasms.

Teachers must believe in their students. While a teacher will disapprove of decisions her students will make from time to time, her students must be convinced that she cares about each of them as individuals, not merely as students. It is unlikely that a teacher can maintain a false appearance of positive regard throughout the year, so we assume that this must be maintained as a state of mind. It may not be possible to teach a person to experience this sort of positive regard, but we believe it is a decision, a stance that can be intentionally adopted, rather than a personality trait that some teachers have and others do not. Positive regard will be reflected in the time the teacher spends with individual students, her attention to detail, her tone of voice and choice of words and physical gestures. Her expectations for students will

convey positive regard, through the confidence she implies when expectations are expressed, and through the quality of attention she pays to resulting performance. She will convey to each student a positive conviction that s/he is both worthy and capable.

Based on the evidence of this study, it would appear that one way good teachers achieve clarity is to anchor the activities of their class in a few clearly articulated central values. These cannot be dictated, but the success of the teachers we observed was related to the fact that they placed great importance on certain things, and this sense of importance and value was communicated daily. These values came from within. Martha Kendall did not feign a love of literature; she truly loved literature, just as Jeri Arrellano cared deeply about personal responsibility and social injustice, and Edith Kleiner honored extending oneself to achieve academic success. It seems important that teachers look within to discover what deep convictions bring meaning to their engagement in teaching. If there is no core of value giving meaning and purpose to her conduct in the classroom, she will not be able to create coherent contexts for students to work and learn within.

It is not enough to hold important values, however. The values must manifest themselves in experiences for others. Teachers must ask, "How are my values reflected in my classroom? Are they consistently evident in the way I structure and facilitate class activities?" Coherence is a function of clarity of meaning developed over time. It will not do to announce to students what matters most, if the values are not reflected in the day-to-day business of the class -- the choice of activities, the system of sanctions and rewards, and the words that are spoken. Everything that students notice in a classroom conveys messages. It is important that the messages reinforce one another. Students need to see that the assumptions about learning and getting along with one another are reflected in their daily activities. The teacher should ask herself, "Would an observer know what I believe to be important by what he or she sees happening in my classes? Would my students be able to explain to an observer what I think is important?"

This study suggests that teachers need to foster student ownership and internal control of activities. An important goal of instruction is to nurture the independence of the student, to give the student increased choice and responsibility for learning. Merely establishing a significant relationship with a student is not sufficient if it results in a top-down imposition of the teacher's goals. Teachers should find ways to offer students choices in setting goals and carrying out activities. In the process, they should make it clear to students that their success in carrying out activities depends largely on their own effort and diligence. Reliance on uniform standards, applied generically, will undermine this effort, indicating to students that classrooms are sites of conformity and coercion.

Teachers build coherent practice by attending to the way activities build upon one another from day to day and week to week (Nystrand & Gamoran 1991). Learning takes place gradually, in fits and starts over time and in timely fashion. Time and timing are key elements of good teaching, both developmentally (fourth graders are able to learn some things but will have to mature to learn others) and interactionally (until they have disengaged from

one activity, they cannot focus on another) (Scovel 1996; Stevick 1996). Lessons are not learned when today's activity is completed. The teachers of our study frequently reminded students of things that had happened in the recent past, and helped them anticipate what would come next. Projects frequently lasted for days, tying the activities of one day to the next. The values of the classroom and the use of established routines provided a broad continuity; the relating of particular content from the past to the present and the future contributed still greater coherence.

Good teachers find ways to tailor activities so that students will not fail or be embarrassed in the course of making an effort. Martha Kendall engaged her whole class in the same activity at the same time -- reading a book, writing a story -- but the nature of those activities was open to individual choices, so that individuals could approach them at different levels. When tasks were more constrained -- editing a sheet of sentences containing errors in punctuation, syntax, and capitalization, for example -- she designated certain students to work together in pairs to present the correct solution to the class, and only publicly called on those students. Edith Kleiner similarly assigned different tasks to different students based on the level of their previous performance, but always made it possible for individuals to elect harder tasks. In public forums, she worked hard to tailor questions and provide supports so that individuals would not become discouraged or embarrassed by a poor performance. Similarly, a new teacher should be prepared to tailor explanations by offering them again and again, in different forms and in different contexts. The notion that "I told you once; you should have gotten it the first time" was alien to the practice of teachers in our study. Explanations were given to the whole group, clarified in individual conferences, and checked again and again in different contexts. Jeri Arrellano frequently asked students to explain to her what she had just explained to them. There were few examples of formally structured collaborative learning, but there were daily instances in all three classrooms of students discussing their writing together, looking for solutions together, and explaining things to one another.

We have not discussed literacy instruction directly in these pages. We believe that reading and writing should figure prominently in the valued activities of the class and be reflected in the allocation of time. However, we believe that to enter into a methodological discussion of literacy instruction at this point will carry us away from our central point, namely that the practice of the classroom must be considered first as a whole -- a social system of patterned relationships and communicative interactions linked to the construction of personal identities. Within the context of coherent practice, the details of successful literacy instruction enjoy a fair amount of latitude. Apart from coherent practice, attempts to identify effective methods are likely to rest on short-lived results at best.

If there is no one best way to teach, then the methods of teaching should not be prescribed. Good teaching cannot be reduced to matters of technique. An implication of this study is that teachers should be given considerable latitude in the details of conducting their class. The proof lies in the pudding: if students learn and are enthusiastic, this evidence speaks for itself.

At the same time, we caution against the use of test scores to evaluate teaching. Complex learning cannot be measured by a single test. Gains on tests pose complex technical problems for interpretation. By emphasizing tests as our most credible indicator of learning, we corrupt their validity and distort good teaching. It is legitimate to ask a teacher to demonstrate what her students have learned, and to ask the students themselves, knowing that the result cannot be precisely interpreted. The focus of teaching should always be on learning, but attempts to measure learning in more precise ways to insure accountability run the risk of distorting the very human relationships at the heart of classroom instruction.

We also caution against over-emphasis on uniform standards for evaluating student work. The desire to maintain high standards in education must be balanced against the enormous diversity of students. The teachers in our study wanted each student to improve to the fullest extent possible, while maintaining willing participation and positive regard. To accomplish this, it was necessary for them to modify the goals and expectations for individual students so that no student gave up because a goal seemed hopelessly unattainable. Teachers were sometimes apologetic about their grading systems, assuming that we valued objective rigor, when they found it essential to communicate to students that effort always mattered, and that success was always under the control of the student. Academic work is a manifestation of culture -- it will always be easier for some students than for others. Teachers must retain the use of professional judgment in evaluating performance. The alternative -- an external system based entirely on fixed criteria -- will systematically disadvantage low income students.

Schools already place too much emphasis on the evaluation and ranking of students. Instead, they should place more emphasis on building community within classrooms and schools and building bridges between the practice of the school and the practices of the community. To do this, schools need to be personable places where the relationships between faculty and students are carefully cultivated; stable places where coherence can develop over time without the fragmentation brought about by frequent changes in leadership and policies; flexible places where individual teachers can pursue coherence in diverse ways; and inviting places where the cultural expressions of the home and the parents themselves are valued and sought after.

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